



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,600	09/23/2003	Isoji Yao	031177	9757

23850 7590 08/25/2004

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP  
1725 K STREET, NW  
SUITE 1000  
WASHINGTON, DC 20006

EXAMINER

COMSTOCK, DAVID C

ART UNIT PAPER NUMBER

3732

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/667,600	<b>Applicant(s)</b> YAO, ISOJI	
	<b>Examiner</b> David Comstock	<b>Art Unit</b> 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>23 September 2003</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities: the specification is not in proper idiomatic English and appears to be a direct translation from a foreign document. (37 CFR 1.52(a).) Appropriate correction is required. If a substitute specification is filed, it must be accompanied by a statement that it contains no new matter.

Page 6, line 5, after "Figures," there are no corresponding Figure reference numerals. Appropriate correction is required.

### ***Claim Objections***

Claims 1-13 are objected to because of the following informalities: the claims are not in proper idiomatic English and appear to be a direct translation from a foreign document. Appropriate correction is required.

In claims 3 and 9, it is unclear what type of pyramid a "regular" pyramid is. Appropriate correction is required to clarify the form of the pyramid.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1, as best understood, is rejected under 35 U.S.C. 102(b) as being anticipated by Bauer et al. (5,584,307).

Bauer et al. disclose a hair styling device comprising a first iron 200 and a second iron 201, that are oscillatable with respect to each other in outward directions 208, 209 (see Fig. 29 and col. 10, line 32 - col. 11, line 40). Bauer et al. also disclose protruding portions 313 on corresponding faces (id. and Fig. 31).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothman (1,798,760) in view of Federico et al. (4,163,143).

Rothman discloses a hair iron device 10 comprising a first iron body 12 and a second iron body 13 that is oscillatable with respect to the first iron body (see Figs. 2 and 3). The first and second bodies each have electric heaters 34 and 36, respectively, embedded therein. Steam is provided from a boiler 43 through a tube 47 to a valve 28 that automatically closes when the device is opened and spring 22 is compressed (see Fig. 1-3 and page 3, lines 73-82 and page 4, lines 3-5). Steam is jetted out of the first iron 12 via apertures 33 (see Figs. 2 and 3). The valve is connected to a drain tube 51 (see Fig. 1). Rothman does not disclose pyramidal protrusions. Federico et al. disclose a hair iron 10 having protrusions 28 (see Figs. 1 and 6). The protrusions are pyramids, i.e., structures or parts having a shape suggesting a pyramid or a three-dimensional

generally triangular object (id.). The protrusions allow the device to simultaneously comb and curl the hair and minimize the number of required operations and improve the efficiency of the device (see col. 3, lines 24-27 and col. 4, lines 55-58). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the hair iron device of Rothman with pyramidal protrusions, in view of Federico et al., in order to allow the device to simultaneously comb and curl the hair and minimize the number of required operations and to improve the efficiency of the device.

Claims 4, 6, 7 and 10-12, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothman (1,798,760) in view of Bauer et al. (5,584,307).

Rothman discloses the claimed invention except for the suction switch and the suction means and holes in the second iron. Bauer et al. disclose a hair iron 2, 3 comprising a first iron 201 that jets steam to a second iron 200 and a suction switch 43 and suction means 37, 55 that sucks the steam through suction holes, in order to allow the device "to get closer to the scalp with complete safety, the vapor being taken back up immediately by the 'suction' line after it has passed through the lock of hair" (see Figs. 29-32 and col. 10, line 32 - col. 11, line 58, esp. col. 10, lines 62-67). It is noted that the device may take alternate forms (cf., e.g. Fig. 30 and col. 11, lines 1-31). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the hair iron device of Rothman with a suction switch, suction holes, and suction means, in view of Bauer et al., in order to allow the device to get closer to the scalp while increasing the safety of the device by immediately taking up

the vapor after it has passed through the hair. With regard to claim 6, it would have been further obvious to provide the holes at any desired location including in an offset configuration, since it has been held that mere relocation of the features of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Claims 5, 8, and 9, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothman (1,798,760) in view of Bauer et al. (5,584,307), and further in view of Federico et al. (4,163,143).

The device of the combination of Rothman in view of Bauer et al. discloses the claimed invention, as set forth above, except for the pyramidal protrusions. Federico et al. disclose a hair iron 10 having protrusions 28 (see Figs. 1 and 6). The protrusions are pyramids, i.e., structures or parts having a shape suggesting a pyramid or a three-dimensional generally triangular object (*id.*). The protrusions allow the device to simultaneously comb and curl the hair and minimize the number of required operations and improve the efficiency of the device (see col. 3, lines 24-27 and col. 4, lines 55-58). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide device of the combination of Rothman and Bauer et al. with pyramidal protrusions, in view of Federico et al., in order to allow the device to simultaneously comb and curl the hair and minimize the number of required operations and to improve the efficiency of the device.

Claim 13, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Rothman (1,798,760) in view of Bauer et al. (5,584,307), and further in view of Habibi (6,119,702).


The device of the combination of Rothman in view of Bauer et al. discloses the claimed invention, as set forth above, except for recirculation of the steam. Habibi discloses a similar device comprising a boiler 48, 56, 58, a steam outlet 60 and a return tube 72 (see Figs. 5 and 6). The return tube 72 returns the steam and condensate to the boiler reservoir (see col. 3, lines 35-38). This provides the obvious benefit of maximizing the preservation of fluid to reduce the rate of refilling the device as well as eliminating potentially messy external drainage (e.g., cf. Rothman, Fig. 1, reference numerals 51 and 52 and page 2, line 105 and page 4, lines 36-42). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of the combination of Rothman and Bauer et al. with recirculation of steam to the boiler, in view of Habibi, in order to maximize the preservation of fluid to reduce the rate of refilling the device as well as to eliminate potentially messy external drainage.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Comstock whose telephone number is (703) 308-8514.

  
D. Comstock  
23 August 2004

  
KEVIN SHAVER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700